STATEMENT OF QUALIFICATIONS

Name of Lab: Scientific Crime Detection Laboratory **Date:** June 4, 2009

> 5500 E. Tudor Road Anchorage, AK 99507

Name: Hayne Hamilton Job Title: Forensic Scientist IV

Discipline(s): Indicate all areas in which you did casework.

Forensic serology/DNA analysis/Crime Scene Investigations Instructor, serology evidence and examinations, DNA

Education: List all higher academic institutions attended.

Institution Degree completed Dates attended Major 1967-1971 Millsaps College Chemistry Bachelor of Science

Statistics & Population Genetics, University of Alaska-Fairbanks (1 hour credit), Alaska Peace Officers Association/Northwest Association of Forensic Scientists, 1999 Crime Conference, Anchorage, Alaska,

April 19-20, 1999.

1996: Principles of Biochemistry I, University of Alaska-Anchorage, Anchorage, Alaska (1 semester)

Molecular Biology, University of Alaska-Anchorage, Anchorage, Alaska (1 semester)

1995: <u>Cell Biology</u>, University of Alaska-Anchorage, Anchorage, Alaska (1 semester)

1994: Readings in Genetics, University of Alaska-Anchorage, Anchorage, Alaska (1 semester)

1989: Biochemical Methods in Bloodstain Analysis School, Univ. of Virginia Graduate School (3 hours credit), FBI

Academy, Quantico, Virginia (2 weeks)

Other Training: List continuing education, workshops, in-service and other formal training received.

2008: Courtroom Testimony Techniques, Ron Smith, Ron Smith & Associates, Inc., Scientific Crime Detection

Laboratory, Anchorage, Alaska, July 29th & 30th, 2008, (16 Hours).

Bottom Line Leadership, Richard Hadden, CSP, Alaska Public Employees Association/AFT, Anchorage,

Alaska, May 7, 2008, (8 Hours).

Performance Coaching, Tim Parker, Instructor, State of Alaska, Department of Administration, Division 2007:

of Personnel Course, September 13, 2007, (7.5 Hours).

Biological Evidence Collection. Kristin Denning, Criminalist III, Instructor, Scientific Crime Detection

Laboratory, Anchorage, Alaska, May 17, 2007 (8 Hours).

2005: Statistical Analysis of Forensic DNA Evidence. George Carmody, Instructor, Carlton University Department of Biology; Ray Wickenheiser, Instructor, Acadiana Criminalistics Laboratory, Anchorage,

Alaska, August 15-19, 2005 (30 hours).

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Other Training: (continued)

- Qiagen Bio-Robot Demonstration, Patrick Bronson-Dougherty, Public Health Laboratory, Anchorage, Alaska (1.5 hours)
 - Real-Time PCR System Mx3000 Seminar, Scott O'Brian, Stratagene, Crime Lab Classroom (3.5 Hours)
- 2003: Quantitative Methods Using RT-PCR, Stratagene On-Line Seminar, Anchorage, Alaska (1.5 hours) NDIS DNA Data Acceptance Standards, Chris Beheim, Anchorage, Alaska (1.5 hours) Forensic Digital Imaging, Imaging Forensics, George Reis, Anchorage, Alaska (3 days)
- 2002: Mixture Interpretation Workshop Parts I and II, George Carmody, John Planz, Fred Bieber, Ray Wickenheiser, Sindey Schueler, Arthur Eisenberg and Bruce Budowle (3 hours) CODIS Workshop Part I, Lisa Kennedy and Carla Heron, Science Applications International Corporation, Arlington, Virginia (1.5 hours) Audit Workshop Parts I and II, Richard Guerrieri, Anja Einseln, Federal Bureau of Investigation, Arlington, Virginia (3 hours) ABI Prism TM 310 Instrument & Software Training, Kimberly C. Bogard, Senior Technical Applications Specialist, Applied Biosystems, Scientific Crime Detection Laboratory, Anchorage, Alaska (9 hours) Population Genetics and Statistics, Scientific Crime Detection Laboratory, Anchorage, Alaska (2 hours)
- Statistics and Mixture Interpretation Workshop, 12th International Symposium on Human Identification-2001: Promega Corporation, Biloxi, Mississippi (14 hours) Scientific Working Group on DNA Anlaysis Methods (SWGDAM), Public Meeting, Biloxi, Mississippi (5 hours)
- Powerflex 16 Fluorescent STR Validation Workshop, Promega Corporation, Biloxi, Mississippi (9 hours) Casework Guidelines & Complex Mixture Interpretation, 11th International Symposium on Human Identification-Promega Corporation Biloxi, Mississippi (10 hours) Scientific Working Group on DNA Analysis Methods (SWGDAM), Public meeting, Biloxi, Mississippi (8 Short Tandem Repeat Analysis by Capillary Electrophoresis, FBI Academy, Quantico, Virginia (1 week)
- STR Workshop, FBI DNA Unit I & Armed Forces DNA Identification Laboratory, Alaska Peace Officers 1999: Association/Northwest Association of Forensic Scientists, 1999 Crime Conference, Anchorage, Alaska, Perkin Elmer Applied Biosystems User Forum, 50th Annual American Academy of Forensic Sciences meeting, San Francisco, California (3 hours)
- 1998: Gene Scan User's Meeting, Perkin Elmer Applied Biosystems, Scientific Crime Detection Lab, Anchorage, Alaska (1 day) Advanced AmpFISTRTM and ABI PrismTM 310 Genetic Analyzer Training, Perkin Elmer Applied Biosystems, Utah State Crime Laboratory, Salt Lake City, Utah (1 week)
- 1997: Presenting DNA Statistics in Court, Drs. Bruce Weir and George Carmody, Promega Scottsdale, Arizona, (2 days) Advanced DNA Technologies Workshop (15 hours), Perkin Elmer Applied Biosystems User Forum (3 hours), DNA Advisory Board Meeting: Quality Assurance Standards for Forensic DNA Testing Laboratories (3 hours), 49th Annual American Academy of Forensic Sciences meeting, New York City, New York

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Other Training: (continued)

1995: PCR Methods Training, K. Webster and R. Reynolds, Northwest Association of Forensic Scientists, Anchorage, Alaska (1.5 days)

DNA Testimony, Dr. Bruce Budowle, Northwest Association of Forensic Scientists, Anchorage, Alaska (4 hours)

Implementation and Consequences of New DNA Technologies: The Sequel, American Academy of Forensic Sciences, Seattle, Washington (2 days)

How to Be a Better Expert Witness, American Academy of Forensic Sciences, Seattle,

Washington (1 day)

AmpliType PM-DNA User Workshop, American Academy of Forensic Sciences, Seattle,

Washington (4 hours)

1994: Frequency of DNA Loci in Various Populations, Dr. Ranajit Chakraborty, Scientific Crime Detection Laboratory, Anchorage, Alaska (4 hours)

Population Genetics, Dr. Todd W. Gayley, Scientific Crime Detection Laboratory, Anchorage, Alaska (3

Crime Scene & Physical Evidence Training, DPS Training Academy, Sitka, Alaska (3 days)

1993: Blood Borne Pathogens Training, Scientific Crime Detection Laboratory, Anchorage, Alaska (2 hours)

AmplitypeTM HLA DQα Forensic DNA Amplification and Typing Training Workshop, Cetus Corporation-Seri, 1991: Richmond, California (1 week)

DNA Workshop (Technical), Cetus Corporation, Northwest Association of Forensic Scientists, Anchorage, Alaska (2 days)

Update on AIDS Seminar; Serial, Mass, and Sexual Homicide Workshop, American Academy of Forensic Sciences, Anaheim, California (3 hours)

1990: Managing Stress for Success, Communications Unlimited, Anchorage, Alaska (4 hours)

1988: Portable Fire Extinguishers, DPS Fire Service Training Center, Anchorage, Alaska (2 hours)

DNA Procedures School, Cellmark Diagnostics, Germantown, Maryland (1 week)

Isoelectric Focusing Workshop, Northwest Association of Forensic Scientists, Missoula, Montana (8 hours)

1987: Crime Scene Management School, Law Enforcement Academy, Douglas, Wyoming (1 week)

1976: Radioimmunoassay Seminar, Tampa, Florida (1 week)

> Introduction to Animal Research, Graduate School (1 semester), University of Mississippi Medical Center, Jackson, Mississippi

Courtroom Experience: List the discipline(s) in which you have qualified to testify as an expert witness and indicate over what period of time and approximately how many times you have testified in each.

1986-present: Serology/DNA, approximately >100 times

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Professional Affiliations: List any professional organizations of which you are or have been a member. Indicate any offices or other positions held and the date(s) of these activities.

Fellow, American Academy of Forensic Sciences (AAFS)

Member, American Chemical Society (ACS)

Member, Northwestern Association of Forensic Sciences (NWAFS), Membership Committee 1999-2000

Member, Alaska Peace Officers Association (APOA)

Employment History: List all scientific or technical positions held, particularly those related to forensic sciences. List current position first. Give a brief summary of principal duties and tenure in each position.

(1) Job Title: Forensic Scientist IV

> Employer: Alaska Department of Public Safety Scientific Crime Detection Laboratory,

> > Anchorage, Alaska

Principal Duties: Supervision of the Forensic Science Technicians Unit (Evidence and Laboratory

Support)

08/08 - present Tenure:

(2) Job Title: Forensic Scientist IV

> Employer: Alaska Department of Public Safety Scientific Crime Detection Laboratory,

> > Anchorage, Alaska

Principal Duties: Supervision of the Chemistry Section (Controlled Substances, Toxicology and Evidence)

03/08 - 08/08Tenure:

(3) Job Title: Criminalist III

> Alaska Department of Public Safety Scientific Crime Detection Laboratory Employer:

> > Anchorage, Alaska

Principal Duties: Perform DNA analysis on forensic casework and convicted offender samples. Perform

scientific techniques in the identification of body fluids, i.e., blood and semen.

Tenure: 07/88 - 03/08

(4) Job Title: Forensic Scientist

> Wyoming State Crime Laboratory Employer:

> > Cheyenne, Wyoming

Serology and microscopy of hairs. **Principal Duties:**

> Tenure: 1986 - 1988

(5) Job Title: Chemist

> Employer: Wyoming Analytical Laboratories

> > Laramie, Wyoming

Principal Duties: Coal, tar analysis.

> 1985 - 1986 Tenure:

(6) Job Title: Chemist Employer: National Space Testing Laboratories

NSTL, Mississippi

Contract work for NASA and EPA. **Principal Duties:**

> Tenure: 1983 - 1985

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Employment History: (continued)

(7) Job Title: Chief Technician

> Employer: University Medical Center

> > Jackson, Mississippi

Principal Duties: Radioimmunoassay Laboratory and taught Nuclear Medicine Technology in laboratory

section.

Tenure: 1974 - 1978

(8)Job Title: Chemist

> Employer: University Medical Center

> > Jackson, Mississippi

Principal Duties: Medical research.

Tenure: 1971 - 1972; 1973 - 1974

(9)Job Title: Chemist

> Natchez Pathology Laboratory Employer:

> > Natchez, Mississippi

Principal Duties: Serology/Bacteriology.

Tenure: 1972 - 1973

Other Qualifications: List below any scientific publication and/or presentation you have authored or co-authored, research in which you are or have been involved, academic or other teaching positions you have held, and any other information which you consider relevant to your qualification as a forensic scientist.

CRIMINALISTICS CERTIFICATION:

Diplomate, American Board of Criminalistics, 2001

INSTRUCTOR CERTIFICATION:

Alaska Police Standards Council Certified Police Instructor (Serology/DNA)

PUBLICATIONS:

DNA Profiling in Two Alaskan Native Populations Using HLA-DQA1, PM, and D1S80 Loci, M. Walkinshaw, L. Strickland, H. Hamilton, K. Denning, T. Gayley, Journal of Forensic Sciences, Vol. 41, No. 3, May 1996, Pp 478-484.

Foliage Plants for the Indoor Removal of the Primary Combustion Gases-Carbon Monoxide and Nitrogen Oxides, B.C. Wolverton, R.C. McDonald, H.H. Mesick, Journal of the Mississippi Academy of Sciences, 1985, 30: 1-8.

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Other Qualifications: (Continued)

SCIENTIFIC PRESENTATIONS:

"Blood Brothers": A Case of "Identical Non-Twins" Michelle L. Gaines-Collins, MSFS*; Cheryl M. Duda, MS; Juley M. Schuerman, BS; Chris Beheim, BS; Abirami Chidambaram, PhD, DC, MPH; Jessica R. Cohen, BA; Hayne Hamilton, BS, American Academy of Forensic Sciences, Seattle, Washington, 2006

How do you explain that? H. Hamilton, An Unusual DNA Case: A case study using DNA typing on penile swabs. The 11th International Symposium on Human Identification, Promega Corporation, Biloxi, Mississippi, 2000.

DNA HLA-DQA1 4 Sub-typing in Two Alaskan Native Populations, H. Hamilton*, L. Strickland, M. Walkinshaw, S. Waltz, and G. Taft, American Academy of Forensic Sciences, New York City, New York, 1997

DNA Profiles on Two Alaskan Native Populations using HLA-DQα, Polymarker, and D1S80, M. Walkinshaw, L. Strickland*, H. Hamilton, K. Denning, C. Beheim, and G. Taft, American Academy of Forensic Sciences, Seattle, Washington, 1995

HLA DQα Allele and Genotype Frequencies in the North Slope Borough Inupiat Eskimos, H. Hamilton*, L. Strickland, C. Beheim, and G. Taft, American Academy of Forensic Sciences, Boston, Massachusetts, 1993

CLASSES TAUGHT TO LAW ENFORCEMENT PERSONNEL:

11/13/03	DNA Evidence, Crime Scene and Physical Evidence Series, Crime Laboratory, Anchorage, AK (4.0 hours)
11/19/99	S.A.R.T. S.A.N.E. Training, Sexual Assault Response Team, Ketchikan, Alaska (2.0 hours)
04/22/99	DNA FOR COPS , Alaska Peace Officers Association/Northwest Association of Forensic Scientists, 1999 Crime Conference, Anchorage, AK (1.0 hour)
11/17/98	PCR-STR DNA Profiling, Genetics Class UAA, Anchorage, AK (1.0 hour)
5/02/97	Forensic Serology Evidence/DNA, Sexual Assault Response Team, Kodiak, Alaska (2.0 hours)
5/02/97 05/03/96	Forensic Serology Evidence/DNA, Sexual Assault Response Team, Kodiak, Alaska (2.0 hours) Forensic Serology Evidence/DNA, Sexual Assault Response Team, Fairbanks, Alaska (4.0 hours)
	Forensic Serology Evidence/DNA, Sexual Assault Response Team, Fairbanks, Alaska (4.0
05/03/96	Forensic Serology Evidence/DNA, Sexual Assault Response Team, Fairbanks, Alaska (4.0 hours)

06/08/90 Forensic Serology/DNA. Alaska State Medical Association Annual Convention, Fairbanks,

Alaska (1.0 hours)

Serological Evidence/DNA, Alaska Peace Officers Association Crime Conference, Juneau, 05/16/90

Alaska (1.0 hours)

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CLASSES TAUGHT TO LAW ENFORCEMENT PERSONNEL (continued):

04/10/90 Forensic Serology/DNA, Crime Laboratory, Anchorage, Alaska (1.5 hours)

03/15/90 Forensic Serology/DNA, Crime Laboratory, Anchorage, Alaska (1.0 hours)

05/89 Forensic Serology/DNA, Alaska Peace Officers Association Crime Conference, Anchorage,

Alaska (4.0 hours)

MEETINGS ATTENDED:

American Academy of Forensic Sciences

2008 - Washington D. C.

2005 – New Orleans, Louisiana

1998 - San Francisco, California

1997 - New York City, New York

1995 - Seattle, Washington

1993 - Boston, Massachusetts

1992 - New Orleans, Louisiana

1991 - Anaheim, California

1988 - Philadelphia, Pennsylvania

CODIS User's Conference

2002 – (8th) Arlington, Virginia

NIJ Grantees' Workshop

2004 – (5th) Washington, DC

Northwest Association of Forensic Scientists

1999 - Anchorage, Alaska

1995 - Anchorage, Alaska

1991 - Anchorage, Alaska

1988 - Missoula, Montana

Promega International Symposiums on Human Identification

2001- (12th) Biloxi, Mississippi

2000 - (11th) Biloxi, Mississippi

1997 - (8th) Scottsdale, Arizona